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ABSTRACT

A physical education specialist at an elementary school in one of the fastest growing sections of the country developed and implemented a developmental motor skills program for primary school students. The program focused on: (1) developing a method of referring students for testing; (2) providing a specialized motor diagnostic test; (3) improving students' self-esteem; and (4) promoting administrator and teacher awareness of the importance of identifying and remediating students with motor skill deficiencies. Participants were 3 girls and 7 boys in the first grade. After target children were pretested and results were evaluated, activities that would improve the children's motor skills were designed. Activities were scheduled over a 10-week period and involved exercise stations for warm-ups, balance, agility, sequencing, visual acuity, auditory discrimination, and coordination. Evaluation results showed that children improved significantly in their overall motor development. Six of the ten children showed improvement in self-esteem. Recommendations are offered regarding the use of the report as a guide for administrators who wish to adopt a similar developmental motor skills program in their schools. Related materials, such as lists of the motor skills activities and symptoms of perceptual difficulties are appended. (RH)

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INITIATING A DEVELOPMENTAL MOTOR SKILLS PROGRAM FOR IDENTIFIED PRIMARY STUDENTS

by

Valerie Terrill Harville

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A Practicum Report

submitted to the faculty of the Center for Advancement of Education of Nova University in partial fulfillment of the requirements for the degree of Master of Science.

The abstract of this report may be placed in the School Practices Information Files for reference.

June 1986

Running head: Motor Skills Program

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Authorship Statement

I hereby testify that this paper and the work it reports are entirely my own. Where it has been necessary to draw from the work of others, published or unpublished, I have acknowledged such work in accordance with accepted scholarly and editorial practice. I give this testimony freely, out of the respect for the scholarship of other workers in the field and in the hope that my own work, presented here, will earn similar respect.

ABSTRACT

Initiating A Developmental Motor Skills Program For Identified Primary Students.

Harville, Valerie Terrill, 1986: Practicum Report, Nova University, Center for the Advancement of Education

Descriptors: Developmental Motor Skills Program/ Diagnostic Motor Skills Test/Motor Perceptual Diagnostic Test/Perceptual Motor Referral/Motor Skill Activities/Motor Skills Diagnostic Test/Perceptual Motor Development/Perceptual Motor Skills/ Physical Education/Skill Development

The author developed and implemented a developmental motor skills program for primary students. This program also focused on: a) Developing a method of referring students for testing. b) Providing a specialized motor diagnostic test. c) Improving student's self-esteem. d) Promoting administrator and teacher awareness of the importance of identifying and remediating students with motor skill deficiencies.

After pre-testing the target children and evaluating the results, activities were designed to improve their motor

skills. These activities were scheduled over a 10-week period and included stations involving warm-ups, balance, coordination, agility, auditory discrimination, visual acuity, sequencing and culminating games. Evaluative results showed that the children significantly improved in their overall motor development. Six out of ten children showed improvement in their self-esteem. Recommendations were made regarding the use of this report as a guideline for administrators wishing to adopt a similar developmental motor skill program in their schools.

Appendic es include a Perceptual Motor Referral Form, Symptoms of Perceptual Difficulties, the Daily Log, a Letter to Parents, the Motor Skill Activities and the Classroom Teacher's Evaluation.

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APPENDIX F

NOVA UNIVERSITY
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OBSERVER VERIFICATION FORM

Verification of Practicum Activity

Dear Observer:

Practicum students in Nova's M.S. and Ed.S. programs are asked to provide external verification that the project activities reported in their final practicum documents took place as described. You have been designated an observer to fulfill this confirmation function by the student named below. On this sheet, then, please write a note attesting to your knowledge of the project activity described in the final practicum report to which this will be attached. (Note that you are not asked to evaluate, or make judgments about the quality of the project.)

Practicum Title Initiating a Developmental Motor Skills Program for Identified Primary Students

Student's Name Valerie Terrill Harville

Program Site Melbourne, Florida Date 5-23-86

Observer's Name Joseph F. O'Brien
(please print ----------and sign)

Observer's position Principal, John F. Turner, Sr. Elementary School

Observer's comment on impact of the project (handwritten):

THIS HAS BEEN AN EXCELLENT PROJECT THAT WILL GREATLY ENHANCE OUR PRIMARY STUDENTS FUTURE ACADEMIC SUCCESS. I FULLY SUPPORT BOTH CONCEPT AND IMPLEMENTATION

Joseph F. O'Brien
PRINCIPAL
5-28-86

CHAPTER I

Purpose

The educational setting of this proposal is a three-year-old elementary school located in the fastest growing section of the county. The school has a population of over 1500 students who range from upper middle class to those living on fishing vessels in the outer reaches of the county. It's population also includes migrant students and those who live on islands. There are 32 main classrooms and 34 portable classrooms that make up the campus of this elementary facility. Only grades kindergarten through second grade are housed in the main school building. The number of classes for each grade level are as follows: 12 kindergartens, 11 first grades, nine second grades, eight third grades, six fourth grades, eight fifth grades, and seven sixth grades. The faculty consists of 80 teachers and appropriate support personnel. The school is administered by a curriculum coordinator and a principal.

In addition to the basic academic programs, the students are provided with physical education, music

library, and computer education as "activity classes". Physical education is available for all students, grades one through six, three times each week, 35 minutes each session. Classes are taught by one of three physical education specialists or the physical education aide. The writer is one of the physical education specialists, new on the staff, but having over 14 years of experience in this field.

The writer had observed in the physical education classes that several students were in need of individualized help in motor skills. Because of the unique size of this school and the constant influx of new students, neither time nor designated class space was allocated for students with those needs.

A target group for this practicum project was selected from a first grade class consisting of 23 students, 16 boys and seven girls. The class was a middle-phase group with the majority being categorized as below average. Because they were exhibiting some difficulties with motor skills, ten children - including three girls and seven boys - were chosen to participate from this group by their classroom teacher. A checklist (Appendix B)

of perceptual difficulties was given to the teacher to assist with the selection, along with personal observations.

While gathering information about testing of primary students in the county, the writer was informed by several primary specialists that only students entering kindergarten or new to the county are tested. A curriculum coordinator stated there is no referral process for motor skill problems. Primary teachers, when interviewed, stated that the screening test used is not only weak in the area of motor skills, but is not a diagnostic instrument. No specified program is provided for practice in motor skills. The Primary Education Program staff that deals with primary student needs in the county contends it is understaffed and under-financed; thus it cannot provide for the testing and implementation of a motor program in the area of gross motor skills.

The writer has determined that there is no referral process, no diagnostic motor skills test, nor a developmental motor skills program for primary students having difficulty with their motor skills.

If these developmental skills are to be met, then there should be a referral process for the teachers to

have their primary students properly screened and diagnosed for motor problems, and thereafter placed in a developmental motor skills program.

The writer, as a means of meeting this perceived instructional need, would like to initiate a developmental motor skills program for primary students identified as having perceptual motor problems. A method of referring students for testing and providing a specialized motor diagnostic test are important secondary concerns of this project.

The objective for this project is to demonstrate that identified first-graders will improve their motor skill scores to norm development after participating in a 10-week developmental motor skills program, as measured and compared with the pre- and post-tests of the Motor Perceptual Diagnostic Inventory. (Medvedeff, 1966).

Changes that the writer is expecting this project to bring about include:

1) Improvement of the students' self-esteem. At the end of the 10-week program, it is hoped the students will feel better about themselves because they will have made improvements in

their physical skills.

2) An awareness by teachers and administrators that deficiencies in motor skills need to be identified and remediated in a developmental motor class.

3) Adoption of a test that does a more specific job of identifying motor problems. Perceptual motor problems need to be identified and remediated during a child's primary school years, because it is during this time that the greatest advancements in motor skill development occur. Emphasis should be put on identifying these students in kindergarten and first grade.

CHAPTER 2

Research & Solution Strategy

In the field of physical education, perceptual motor training was a major topic during the late 1960's and early 70's. Every graduate class was playing "catch up" to become familiar with the words and phrases associated with this area of concern in physical education. However, in research of the literature, the writer has found little currently written on that subject. A new focus has emerged in the last decade: Physical Fitness.

Nevertheless, the writer, in talking with several educators involved in screening primary children, has found that the need for perceptual motor training continues to be an area of concern. Dr. John Powell, a professor at the University of Central Florida, has been doing a considerable amount of research and testing in the area of motor development screening. He has worked with several of the state's school systems in devising a better way of recognizing students with motor problems.

While attending a workshop in fitness, this writer had the opportunity to talk with a national consultant

of the President's Council on Physical Fitness and Sports, Lee Allsbrook, who is also an associate professor at a Tennessee university. He expressed his opinion that the level of concern for perceptual motor development had died down because no concrete evidence had been found to prove that the perceptual program made a difference. He also felt that although the real need for the program is at the pre-school level, there is an apparent lack of qualified personnel to carry out a quality job.

Deriving pleasure from mastering a movement task is an achievement most students would like to obtain. However, the testing of fundamental motor skill development in pre-kindergarten children that was done in the 1970's showed that one in five children lagged behind in the development on one or more fundamental motor skills. (Temple, 1979). In Bryant Cratty's book, "Active Learning", it was stated that 15 to 18 per-cent of all school children suffer from some kind of measureable coordination problem. (1971).

Parental attention in a child's young life is geared toward the basic needs of proper nutrition, sleep and cognitive development (as in learning to speak and

understand the native language). "Meanwhile, the young child usually approaches physical tasks without special attention or guidance." (Clifton, 1970, p.34).

"Physical clumsiness can blunt a child's opportunities to grow socially, influence his social acceptance and in general brand him as competent or incompetent as a moving, playing individual." (Cratty, 1975, p.12).

Jerome Bruner, a theorist who was interested in problem-solving approaches to learning, pointed out that the development of a motor skill is a problem-solving venture, one in which pieces become organized in the sequence necessary for attaining a performance goal. (Rarick, 1980).

J. Guilford, in his book about human intelligence, suggested that perception was a building block for the development of cognitive and/or intellectual activity. (Guilford, 1967).

John Haubenstricker (1982), in his article about motor development, states that remediation is best accomplished during early childhood because it is during this time that the greatest advancements in postural control and skill development occur.

"There is some evidence to suggest that for slowly-developing children there is an important link among perceptual-motor, perceptual, and cognitive behavior, and when one aspect of that development is delayed, other related dimensions of the child's behavior may also show some alteration or delay." (Williams, 1983, p.30).

"Movement therapy is not a panacea for established patterns of maladjustment, but it will slowly and gradually help the child to gain in inner harmony and motor skills." (Kiphard, 1970).

A study which was concerned with the importance of motor performance and its relationship to reading and math abilities concluded that there is a low, but significant relationship between the subject areas mentioned. (Harris and Jones, 1982). However, Bryant Cratty (1972) cited a study concerned with movement games requiring the use of thinking skills. The students involved made academic gains ranging from measurable to startling.

"Physical skills and movement behaviors are integrated with many aspects of the child's maturing personality. Self-control of motor functions is a necessary accompaniment to good academic proficiency in most passive school

environments." (Cratty, 1975, p.12).

An article written in 1981 (Reid) suggests that perceptual motor training has lost its utility. Mr. Reid suggests that any good physical education program would be able to provide students with their needs.

"Practice is a necessary prerequisite for the acquisition of skills and the way in which practice is structured is of utmost importance. There is more to structuring the practice session than providing for repetition." (Morris, 1981, p.49).

Johnson and Fretz, in their research on perceptual motor skills, indicated that certain perceptual-motor skills can be significantly improved for children who take part in a development program for a specified period of time. (1967).

There are many pros and cons about this area of perceptual-motor development, but the need for children to improve those basic motor skills persists. In considering their individual needs relative to physical growth, motor performance, and self-esteem, this writer feels that the need for an effective developmental motor skills program is of utmost importance.

The writer was not able to locate any on-going motor skill programs. In reviewing the literature, the writer decided to combine several suggested programs to fit the needs of the school's specific target group.

The first area of concern is the planning of the program. It must first be justified. Are there any students able to benefit from this activity? Is there time in the school day to offer such a specialized class? Cost of materials is not a factor because most items needed are used in the physical education classes. Other items may be ordered through a physical education catalog or can be made by hand. In order to reach as many children as possible during the program, peer tutors might be utilized.

When the program is considered viable, plans would be made based on the results of the pre-test. Current literature describing perceptual-motor programs may also exert an influence.

It is suggested in the literature that a progressive and sequential plan be put together that includes the following areas: balance, coordination, visual acuity, locomotor skills, body and space awareness, and

manipulation skills. The writer has put together a 10-week developmental motor skills plan that encompasses all of the above, using written sources, and related personal experience.

The second area of concern is a screening or diagnostic test. Several were considered. Some were either outdated, not specific enough for a good overall evaluation, or too long for the time that could be allowed. The one chosen was highly recommended by a professor who is actively engaged in this type of testing for children in this state. He commended its specific diagnostic capabilities and its emphasis on the primary program. Another decision factor was the fact that the author of the Motor Perceptual Diagnostic Inventory (Medvedeff, 1966) had worked successfully with several counties in this state to develop this diagnostic instrument. The test, however, is currently out of print due to a publisher problem. The author assured this writer that the test will be back in print soon. The author of the Inventory said he would be willing to work with anyone who wishes to give the test to his/her students.

The third area of concern is the referral process

for motor skill problems. There is no referral for motor skill problems, so the writer created one that would make the procedure simple and efficient. (Appendix A).

CHAPTER 3

Method

The practicum project was implemented during a ten-week time period from March 17 to May 30, 1986. The project consisted of activities to aid children in improving their developmental motor skills.

First, permission of the school principal was obtained after a letter was given to him outlining what was proposed, where it would occur, and a timeline.

The role of this writer was to instruct, guide and evaluate each child's ability to reach norm development after participating in a 10-week developmental motor skills program. Evaluations were done through teacher observations, checklists in the daily log and pre- and post-test results.

A target group of 10 children was selected from a first grade class. The classroom teacher was asked to identify them using a checklist of Symptoms of Perceptual Difficulties (Appendix B), and her own observations.

After the children had been selected, a letter (Appendix C) was sent home, not only to get the parents'

permission, but to explain the program and to assure them that if they had any questions or would like to see the program in action, they were welcome.

Peer tutors were chosen from the sixth grade classes. These students were selected because they were observed as having problems with self-esteem. A mixture of boys and girls was used with the intent of developing an on-going rapport with the target group, and having a peer tutor for each station. These tutors were given the responsibility to set up the stations, demonstrate the activities, observe and assist the first grade students and participate in the daily evaluation of each student.

In preparing the peer tutors for the program, the writer explained the purpose behind the activities and asked the tutors to be as supportive and positive as possible. They were also asked not to perform the activities for the students, but to try and talk them through it as best they could.

A daily log (Appendix D) was created for each child for the purpose of evaluating and monitoring each session. This log had to be in the form of a checklist so that the evaluation process could proceed quickly while the students

were still visible to the tutors (the tutors were not always the same). The log was kept on a clipboard to be completed while outside. The activity sessions were held both on the physical education hard courts as well as on the playing fields.

The first week of implementation consisted of pre-testing the 10 students using the Motor Perceptual Diagnostic Inventory. (Medvedeff, 1966). The test took about 20 minutes and was given on a one-to-one basis so as to give each child the benefit of concentrated observation.

The results from the pre-test were used to prepare an individual prescriptive form for each identified child for his or her developmental motor skills program. It was indicated in the pre-test results that emphasis needed to be put in the area of visual acuity. This was done, but in researching the subject area, much controversary was found in the literature as to whether improvement could be achieved through developmental motor activities. (Cratty, 1970).

The Motor Skill Activities (Appendix E) included stations involving warm-ups, balance, agility, sequencing, visual acuity, auditory discrimination, and coordination.

These activities were prepared in a progressive sequence allowing for the fact that this project was beginning at mid-term and the students had already been introduced to many of the basic skill concepts in their physical education classes.

The activities began on the second week. These were conducted Tuesday through Thursday and lasted approximately 30 minutes each day. At the end of each session, the tutors sat down with the writer and evaluated each child on his or her performance that day.

At the end of each week, the writer consulted with the classroom teacher as to the behavior of the group and any possible improvements in the academic area. At the beginning of the project, the classroom teacher was asked to respond to the following questions:

1) Why did you pick this child for the program?

2) Has the child's self-esteem improved?

3) Is the child more settled and willing to listen?

4) Is there any improvement in academics?

In order to further prepare for the activity portion of this practicum, the writer contacted and asked for current information from the American Alliance of

Health, Physical Education, Recreation and Dance Elementary Consultant, Dr. Margie Hanson; The Florida Department of Education Physical Education Specialist, Mr. Manny Harageones. The writer also attended the yearly presentation of the Florida Elementary Physical Education Demonstration School to view what they were doing in the area of motor skill development.

When the activities had been decided upon, an inventory was made of the equipment needed. A few items had to be borrowed from other schools, and a request was made of the district facilities and support department to paint a grid and hopscotch pattern on the hard court of this school. These requests were granted in time for the project's start.

Week two - Four stations were introduced to the students: warm-ups, balance beam, stunts, and the grid. Each day a new activity was presented at each station, always in a progressive step. The peer tutors demonstrated the activities and the students were equally divided up among the stations to begin. As the students finished the activity, they moved on to the next uncrowded station. Upon completion of the stations, the group came together

for a culminating game which used some of the skills being emphasized that session. Evaluation took place while the students were allowed to practice the station activities on their own.

Week three - A ladder was added to the stations. The game this week emphasized group cooperation. A change took place in the peer tutor ranks, as one of the tutors decided it was not for him. A replacement was found.

Week four - A hoop station was added and the stunts station taken out for this session. Adjustments were made in the warm-up and game activities as the concept was not working successfully.

Week five - A visual tracking activity was added using the horizontal ladder. Because the ladder was made of aluminum, doing a stunt called the "seal walk" was quite uncomfortable, and an adjustment was made on the ladder activity. On the balance beam, a circus type activity (use of a balance pole) was well-received.

Week six - A lot of equipment was utilized this week including frisbees and balls for visual tracking. Jumping was a station added this week. The use of a squat position on the balance beam proved quite a challenge.

Week seven - Bowling was used as a target practice activity and stunts were brought back in with the use of mats. On the ladder activity, water was used to increase attention and add fun during a balancing and coordination activity. The peer tutors were asked to come up with several stunts that the first graders could perform in a game situation.

Week eight - The focus was on rights and lefts. This included an auditory activity that the students performed with hoops to show direction. The game for this week also included a "chorus line" which included the peer tutors interspersed throughout the line to give immediate direction and help.

Week nine - This was the last activity week and music was introduced for the purpose of auditory discrimination. A lot of partner activities were attempted this session and the peer tutors often had to be that partner since one of the 10 first graders had moved out of town.

Week ten - The final week of implementation was devoted to the post-test, again on a one-to-one basis.

A pizza party was thrown on the last day (with

the parents supplying the drinks) to bring together all those that were involved with the project and to reward the target group and peer tutors for doing a good job.

The results of the post-test were shared with the classroom teacher. A final program evaluation was done with the help of the written report prepared by the classroom teacher answering the questions previously identified. The classroom teacher also kept the interested parents up-to-date on their children's progress in the program.

The total practicum project was reviewed with the school principal and met with favorable comments and encouragement.

This writer is helping to open and teach at a brand new elementary school this fall and is in the process of presenting this program to the principal for his adoption.

After the start of the new school year, the project will be presented to the county Primary Education Program office. It is hoped that the program will be adopted when funding is achieved.

CHAPTER 4

Results

The focus of this practicum project was concerned with:

1) Improving motor skill scores for identified first graders to norm development after participating in a 10-week developmental motor skills program.
2) Improving the students' self-esteem.
3) Bringing about an awareness by teachers and administrators that deficiencies in motor skills need to be identified and remediated in a developmental class.
4) Locating and adopting a test that does a more specific job of identifying motor problems.

The pre- and post-test used to evaluate an improvement in motor skill was the short form of the Motor Perceptual Diagnostic Inventory (Medvedeff, 1966). The test covered four areas: Gross Motor, Balance and Coordination, Coordination Neural Maturity, and Ocular Motility.

A sample of the Motor Perceptual Diagnostic Inventory, including scores and written observations of one student, is shown in Figure 1. "Quantitative scores assigned to each item were rated on a gradient from (4) to (1). A score of (4) indicated the performance was adequate or better and that there is no room for improvement. A score of (3) indicated that while performance is acceptable, there is room for improvement. A score of (2) indicated that the performance was attempted but not acceptable. A score of (1) is assigned to all items which the child will not or cannot perform." (Medvedeff, 1966).

In Table 1, which gives the results of the Motor Perceptual Diagnostic Inventory, the two scores listed under Balance/Coordination, and Coordination Neural Maturity are those first tested with eyes open and second with eyes closed. The Ocular Motility test was given first binocular, second monocular-left eye, and third monocular-right eye, thus three scores. The Total scores listed involve only the sum of Gross Motor, Balance/Coordination, and Coordination Neural Maturity. The Ocular Motility score is not included in the total, as it is treated separately for observation and scoring

purposes.

As indicated in Table 2, the Gross Motor scores for children B,E, and G are considered below norm development and require more remedial work in that area. All the remaining scores were well above the cut off point indicating a sizeable improvement in all but the three Gross Motor scores.

According to the classroom teacher's end report (Appendix F), six of the children showed an improvement in self-esteem, while four did not. This was a very important area in the success of this project.

As indicated in the Observer's Verification form signed by the school principal, this project was felt to be worthwhile and needed. Several teachers, upon observing the activity portion, were interested in finding out more about the class and how to refer their students. The leaders in the Primary Education Program were both very supportive and very interested in the final results of this practicum project.

It is this writer's opinion, based on use of the instrument, that the Motor Perceptual Diagnostic Inventory (Medvedeff, 1966) did not give the necessary information

to prescribe a viable developmental motor skills program, and that the search should continue for a more helpful instrument.

MOTOR PERCEPTUAL DIAGNOSTIC INVENTORY*

Gross Motor

	Eyes Open	OBSERVATIONS
		Took shoes off - too big
Walk Forward		
Walk Backward		
Skip	4	
Creep (Cross Lateral)		
Cross Lateral Walk		
Run		
Walk Forward on Toes*	2	Heels out
Walk on Heels *	3	
Hop Forward on 2 Legs*	3	Heels out slightly
1 Leg *	2	(R) L Trouble with balance
1 Leg *	2	R (L) Lots of trouble w/ balance
Score	16	

Balance - Coordination

	Eyes Open	Eyes Closed	
Toe Touch			
Knee Bend	* 3	4	Lost balance
Arm Swing			
1 Arm Forward (R) L	* 4	2	(R) L Lost balance & swung body toward arm
1 Arm Forward R (L)	3	3	R (L) Body moved toward arm
2 Arms Forward	* 2	2	Lost balance & arms ran into each other
1 Arm Reverse (R) L	* 3	4	(R) L
1 Arm Reverse R (L)	2	2	R (L)
2 Arms Reverse	* 4	3	
Running In Place			
Sit Up	* 1	1	Tried 5 times
Leg Lifts			
1 Leg R L			R L
1 Leg R L			R L
2 Legs			
Rise from Floor (Seated Position with Hands on Head)	* 2	2	2nd try / Lost balance with eyes closed
Jumping Jack	* 3	2	
Follows Instructions			
Score	27	25	

Comments:

Scoring: 1. Will not or cannot perform; 2. Performance no acceptable;
3. Performance Acceptable---room for improvement; 4. Performance at norm.

* All (*) items are for administration of the short form of the MPDI.

Table 1 - Motor Perceptual Diagnostic Inventory Results

Child	A	B	C	D	E	F	G	H	I	J
Gross Motor										
pre-test	19	12	23	21	13	24	16	24	22	24
post-test	*	13	20	16	15	20	15	20	23	20
Balance/ Coordination										
pre-test	36/33	24/21	34/32	34/31	17/34	31/34	27/25	28/27	33/28	43/39
post-test	*	35/33	40/39	39/39	36/35	37/35	34/34	40/40	40/39	37/35
Coordination Neural Maturity										
pre-test	40/38	33/30	37/34	35/35	26/24	38/30	32/28	38/34	31/29	27/30
post-test	*	40/38	40/38	39/38	40/36	38/38	37/35	40/39	38/34	39/38
Total										
pre-test	88/71	69/51	104/66	90/66	56/58	93/64	75/53	90/61	86/57	94/69
post-test	*	88/71	100/77	92/77	91/71	95/73	86/69	100/79	101/73	96/73
Ocular Motility										
pre-test	20/17/24	14/13/15	15/15/18	21/16/19	19/13/15	24/18/23	20/12/13	22/24/24	24/24/23	20/17/18
post-test	*	22/24/24	22/18/18	24/22/23	22/30/23	24/24/24	24/24/23	24/24/24	24/24/24	24/24/21

* Child A moved before the test was given

Table 2 - Motor Perceptual Diagnostic Inventory

Cut Off Scores (Medvedeff, 1966)

Short Form (eyes open)

Gross/Motor	Balance/Coordination	Neural Maturity	Total
16	20	27	63

CHAPTER 5

Recommendations

It is the desire of this writer to share this practicum report with appropriate county administrators and persuade them, due to the success of this project, to implement elementary developmental motor skill classes as needed.

The Primary Education Program (P.R.E.P.) is awaiting funding to expand their program into developmental motor skill workshops. This writer would recommend this project be used as a guideline for implementation at other schools. The activities would have to be adjusted to the needs of the students at each site.

The final recommendation is not to adopt the Motor Perceptual Diagnostic Inventory for the purpose of perscribing a meaningful motor skill program. The kit that the test comes in was not sufficiently helpful to prescribe activities for improvement in motor skills. It is hoped that research will continue to develop a diagnostic and prescriptive test that will be appropriate for primary students.

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APPENDIX A

REFERRAL FOR PERCEPTUAL MOTOR TESTING

Date: _____

Child's Name: _____

Child's Age: _____ Sex: _____

Child's Classroom Teacher: _____

Grade Level: _____

Referring Teacher: _____

Reasons for Referral:

APPENDIX B

SYMPTOMS OF PERCEPTUAL DIFFICULTIES

Development of perception begins with gross motor development by the child before birth and proceeds through the long continuum of skills into ultimate integration. This is the normal process.

Researchers agree that the development of perceptual skills should be sequential. Unfortunately many children are lacking skills within various areas of sequential development. Researchers agree also that these skills can be improved and trained by certain exercises and activities.

The question often asked is: How do I know if a child needs perceptual training?

Teacher observation is an important clue to the answer.

Some symptoms to look for are:

1) Difficulty in recognizing objects and their relationship to each other in space.
2) Clumsiness at games and in everyday activities.
3) Confusion and distortion of visual symbols.
4) Character and behavior disorders.
5) Low academic performance.

6) Inability to differentiate letters such as b and d or recognize sequence of letters in a word.

7) Poor eye-hand coordination.

8) Difficulty in perceiving pictures correctly.

9) Poor self-concept.

10) Difficulty in fine motor activities.

11) Inattention.

12) Carelessness.

13) Loss of place on page.

14) Inadequate perception of size and shape.

15) Difficulty in understanding the meaning of words up, down, in, out, over, etc.

16) Inability to retain and recall instructions.

17) Inability to follow and trace objects.

18) Inability to maintain correct body posture.

19) Inconsistency in use of one eye, hand or foot in performance of activities.

20) Poor ability to reproduce rhythm sequence.

(This list was obtained from a former perceptual motor specialist for Orange County Schools, Peggy Scharfenberg.)

APPENDIX C

Letter to Parents

Dear Parents,

Your child has been selected (with your permission) to participate in a DEVELOPMENTAL MOTOR SKILLS PROGRAM.

Students were observed by their teacher in the classroom and their physical education teacher as having slight problems with their motor skills (such as holding their pencil correctly, having problems with catching or throwing objects, inattention, letter reversals, skipping, balance, etc.).

A program is being piloted for a ten (10) week period to diagnose any problems and work with the students to improve their motor skills. The children will be worked with approximately thirty (30) minutes three (3) times per week with their physical education teacher. Please feel free to ask any questions or to come and visit the work site to see the program in session.

It is hoped that after the ten week period, an improvement will be shown in the areas of fine and gross motor skills (such as writing, reading, arthmetic, skipping, balance, throwing and catching etc.).

Thankyou for your support in improving your child's education.

Sincerely,

Valerie Terrill Harville
Physical Education Instructor

YES, I give my permission for my child to participate in the Developmental Motor Skills Program.

_____
Parent or Guardian's Signature

APPENDIX D

Daily Log

Activity	Didn't Listen	Had Trouble	Successful	Very Successful	Comments
Wk 2					
Warm-up					
Beam					
Stunts					
Grid					
Game					
Wk 3					
Warm-up					
Beam					
Stunts					
Ladder					
Grid					
Game					
Wk 4					
Warm-up					
Beam					
Ladder					
Grid					
Hoops					
Game					
Wk 5					
Warm-up					
Beam					
Ladder					
Grid					
Visual					
Hoops					
Game					

Key: 1 = 1st day
2 = 2nd day
3 = 3rd day

Activity	Didn't Listen	Had Trouble	Successful	Very Successful	Comments
Wk 6					
Warm-up					
Beam					
Ladder					
Grid					
Visual					
Jumping					
Game					
Wk 7					
Warm-up					
Beam					
Stunts					
Ladder					
Grid					
Target					
Game					
Wk 8					
Warm-up					
Beam					
Stunts					
Ladder					
Grid					
Auditory					
Game					
Wk 9					
Warm-up					
Beam					
Ladder					
Grid					
Visual					
Jumping					
Game					

APPENDIX E

Motor Skill Activities

WEEK 2

Warm Up

1) Steeple chase activity. (Teacher will name off several activities that the students must do in sequence.) i.e: Run to the spider web, crawl through, run in and out of the four tether poles, climb the ladder of the fort, go to the other side and climb down the tire ladder, run to the pull up bars and swing two times, come back to the teacher.

Balance Beam

1) Student walks the length of the beam, forward and backward, keeping arms out for balance, when in the center of the beam, student will attempt an arabesque balance.

Stunts

1) Student attempts a mule kick, turk stand, coffee grinder and heel click.

Grid Pattern

1) In a pattern block of two columns, twelve squares, the student will be asked to first jump (two feet) into each of the squares in one column.

2) Student will jump with the right foot in the right square and left foot in the left square, up the columns.

3) Student will attempt the above backwards.

Game

1) Students will all sit in a circle. A jumper

stands in the center with eyes closed. A roller rolls the ball at the jumper's feet and calls "jump" when the ball is about to hit the jumpers feet. The jumper jumps over the ball and turns to face the person who has caught the ball.

WEEK 3

Warm Up

1) Neck rotations, windmills, laterality jumping over a line on the court (both side to side and front to back for 20 seconds each).

Balance Beam

1) Student stands by the side of the beam and jumps over the beam.

2) Student walks down the beam sideways and steps over a stick obstacle, held about six inches above the beam.

Stunts

1) Two people hold a line which is approximately three inches above each participants head. The students attempt to touch their heads to the rope.

2) Frog dance - student is in a squat position with one leg stretched out straight, student attempts to jump and switch legs out front maintaining the squat position.

Ladder

1) Student jumps forward between rungs of ladder. Student walks forward balancing on rungs of ladder without touching the floor.

2) Student walks backward between the rungs.

3) Student jumps backward between rungs.

Grid Pattern

1) Using the two column, eight square hopscotch game, student starts with both feet in first square, then jumps forward making a half-turn to land in the next square. Continue to the end.

2) Student does the same as above but with a ball between the legs.

Game

1) All students are in a circle, first player places hoop over head of second person and together they pick the hoop up. Together they place the hoop over a third person and then all three lift it up and so on around the circle. This continues until all hands are on the hoop.

WEEK 4

Warm Up

1) Run around two circles on court and return.

2) Student finds personal space and does quarter

half and whole turns.

3) Sitting in front of teacher, the students will follow the teacher's index finger as it moves slowly in a straight line, up and down in a large zigzag pattern and in a diagonal pattern. Student will then do the same with one eye covered. Students will then do the same activity with a partner being sure to move finger very slowly.

Balance Beam

1) Student will walk forward, with eyes closed, on the beam, making sure to feel way with feet. Spotter must be present.

2) Cross bar obstacle - student will walk forward and step over the cross bar. (cross bar consists of two cones with a yardstick across both tops)

3) Student will stand on one side of beam, jump up on beam and maintain balance. This is to be done three times followed by walking backwards off the beam. Spotter must be present.

Ladder

1) Student will jump forward between rungs of ladder.

2) Student will walk forward balancing on rungs of ladder.

3) Student will walk backward between rungs.

4) Student will jump backward between rungs with a spotter present.

Grid Pattern

1) Student will jump with right foot in right square and left foot in left square, forwards and then backwards.

2) Students crab walk through the grid pattern being sure that hands and feet touch each square in a two column line.

Hoops

1) Student will jump over a cross bar landing in the first hoop, freeze movement, then continue jumping into other three hoops. O O O

2) Student will jump through two hoops, over cross bar, freeze movement, and then jump through remaining hoop. O O O O O

Game

1) Students will find their own space. When a signal is given they will move one hand around them as many places as possible.

2) On signal students will discover how many places they can move one foot without having to touch the floor.

3) On signal students will find how many places they can move one hand and one foot at the same time without touching the floor.

WEEK 5

Warm Up

1) Students will lie on the floor and draw circles, triangles and squares, with alternating feet and arms, in the air.

2) Students will face a partner in a sitting position, on the ground, with legs spread apart, feet touching and holding hands. One student will lean forward while the other leans back in a rowing sequence.

Balance Beam

1) Student will stand by the side of the beam and jump over it from side to side. Spotter must be present.

2) Student will walk forward carring a balance pole, using an overhand grip, hands shoulder width apart. As a challenge the student can balance rings on each end of pole or hold only one end of pole while balancing rings on other end of pole.

Ladder

1) Student crawls forward on hands and knees in spaces between rungs.

2) Student places hands on rail of ladder and pulls body along ladder in a seal walk position.

3) With someone holding the ladder on its side, the student will crawl in and out the "windows", forwards and backwards.

Grid Pattern

1) Students will hop, jump or take large steps backwards in a zigzag pattern.

2) Students will hop or jump three squares forward and then hop backward two squares. Repeat.

Visual Tracking

1) Ball will be extended from a horizontal ladder. Student will be asked to hit the ball first with the right hand, then with the left, both while the ball is stationary and then in motion.

Hoops

1) Using two hoops connected by a six foot line between them, the student will start with both feet inside the first hoop. The student then will proceed walking down the length of the line using cross over steps until reaching the end hoop.

Game

1) Using the balance beam, split group up with half the number at each end. First player holds a paper cup filled with water. This player then walks down to the other end of beam and pours the water in the cup into the cup of the second player. The game continues until all have had a turn.

2) Students at both ends walk to the middle of the beam and exchange cups filled with water. They then proceed back to their team and give cup to next person.

WEEK 6

Warm Up

1) Students stand tall, stretch to the sky. Sitting with their legs spread apart, have them stretch their right hand to their left ankle, then left hand to right ankle. See if they can put their head to their knee.

2) Students will squat five times thrusting their legs into a pushup position each time (squat-thrust) and returning to a standing position at the end of each one.

Balance Beam

1) Student will walk forward and step over four bean bags spaced evenly along the board without looking at their feet.

2) Student will stand sideways on the beam and bend their knees into a squat. They will then stand straight up and take two side steps repeating pattern to the end of the beam.

3) Student will stand beside the beam, place their hands on the beam, and jump over it with arms lifting body. Continue pattern down the length of the beam. Spotter needed.

Ladder

1) Student runs between rungs.

2) Student will place both feet inside the first rung, then jump outside the ladder, then back inside to the next space.

3) Using a ball, the student will walk on outside of ladder, bounce and catch the ball in the spaces between the rungs. Walking along the side of the rails, the student will bounce the ball inside each rung.

4) Students will place the ball between their legs and attempt to jump over and between the rungs of the ladder. Spotter required.

Grid Pattern

1) Students will step through the center lane of squares stopping at each square to drop and catch a ball in the squares on either side of them before proceeding on to the next.

2) Student will begin on their right foot and hop three squares, change to their left foot and hop three squares, then change to their right for three more. Continue pattern.

3) Student holds hands with a partner and hops the above same pattern.

Visual Tracking

1) Students will toss and catch frisbees, that they have thrown themselves, above their head. Then they will throw and catch with a partner.

Jumping

1) Students will jump off a bench landing in a hoop laid out in front of their path.

2) With a cross-bar obstacle in front of the first square of a hopscotch pattern, the student will jump over the cross bar and freeze in the first square. The student will continue to jump the hopscotch pattern and jump over the cross bar obstacle on the way out of the game.

Game

1) Students place a beanbag between their foreheads and that of their partners. Hoops are scattered on the ground. Students attempt to pick up the hoops and drop them over their heads without losing their bean bag.

WEEK 7

Warm Up

1) Have students draw an imaginary line from the middle of their foreheads to where their legs separate. Emphasize the two sides of the body (right ear, cheek, etc.)

2) Using the game of Simon Says, ask the students to use their right hand to touch their right knee, cross the midline and touch their left knee and so on.

Balance Beam

1) Student walks to middle of beam where a hoop will be held about six inches above the beam. Student will step through the hoop without touching it and continue to walk to the end of the beam. Repeat walking backwards and sideways.

2) Student will walk to the middle of the beam, make a half turn and walk backward to the end of the beam.

3) Remove one of the supports of the beam. This will make it into an incline board. Have the student walk upward, make a half turn and return to the starting position.

Stunts

1) Students will lie on their stomach, on a mat, with their left hand and right knee brought forward and head turned facing toward their right hand. (thumb-sucking position). On command, student will flip to the same position facing the other side. Do this five times.

Ladder

1) Student will stand sideways to the ladder and walk sideways over the rungs keeping their left foot in a leading position at all times.

2) Students place a beanbag on their right foot and carry a cup of water in their left hand. Students must cross each rung all the way down without losing the bean bag or the water.

Grid Pattern

1) Student places hands on hips and jumps forward two squares, stops and taps on the right side square with the right foot and on the left with the left foot. Repeat pattern all the way to the end of the grid.

2) Student will alternate and perform a step in one square and a hop in the next. Repeat the pattern.

3) Student will attempt a grape-vine step throughout the grid by standing with both feet in the first square sideways. Then they will step to the right on the right foot, cross left foot over it and step to the right on the right foot again and cross left foot behind. Repeat pattern.

Target Practice

1) Student will attempt to roll a ball at several bowling pins set up 10 feet away and knock the pins over. Two or three tries are allowed. Student will use two hands first and progress up to a one-hand roll.

Game

1) Students form a circle. The first player performs a stunt, second student repeats the move and adds one. This is repeated around the circle so that all players will have a turn.

WEEK 8

Warm Up

1) Student will attempt a "cobra",by lying on stomach pushing arms up straight under chest and letting their head drop back far enough to touch feet that are bent at the knees.

2) Students will lie on their backs and bring their left knee up to their right shoulder. Alternate knees and shoulders.

3) Students will lie on their backs, lift their hips up with their hands and attempt to bicycle the legs in a pedaling fashion.

Balance Beam

1) Student faces the side and slides to the right saying "right" each time the right foot moves. The student will then repeat the same with the left.

2) Student steps on the beam, faces sideways and steps to the right while placing the left foot behind and beside the right foot in a grape-vine pattern. Continue down the beam.

3) Student puts left arm over head while leaning to the left and sliding to the right. Do the same motion to the right.

Stunts

1) Student will perform a log roll while holding a ball overhead on a mat.

2) Student will perform the same as above only with the ball between the feet.

Ladder

1) Student covers eyes while walking, jumping and hopping through the rungs with a helper. Helper talks

student through the task.

2) Student crab walks on the rungs of the ladder, and on the sides.

Grid Pattern

1) Student will perform a zigzag pattern by walking forward crossing the right foot over and placing it in the left square, repeating with the right.

2) Partners will stand in their own squares, side by side, holding hands. They will jump one square forward and land face to face holding both hands. They continue to jump forward again and land side by side holding only one hand. Repeat.

Auditory Activity

1) Each student receives a hoop and seeks their own personal space. Students will show their own interpretation of the following directional terms:

apart-together	front-back
up-down	on-off
forward-backward	on top-on the bottom
sideways-beside	higher-lower
closer-away	between-in the middle-center
near-far	inside-outside
above-below	around-through
over-under	behind-to the rear-in front of
to-from	to the side

Game

1) Students stand in one line (chorus line fashion) holding hands. They move across the room once in each of the following movement patterns:

Jump, step.	Jump, jump, step, step.
Hop, hop, jump, jump.	Kick left foot to right, Kick right foot to the left.

WEEK 9

Warm-up

1) Students choose partners. One student stands while the other lies on back and puts feet in first student's hands. Student on back crosses first one foot, then other foot and touches floor with toes. Change places.

2) Student lies on stomach and bends knees up toward back reaching hands back to grasp feet. Student then rocks back and forth like a rocking horse.

3) Student sits facing partner, then clasp right hand to right hand, left hand to left hand. Then shake hands and rub hands together always right to right, left to left.

Balance Beam

1) Student performs four-legged walk with both arms and feet on beam.

2) Student walks to end of beam, then backwards to the middle and performs a knee balance.

3) Student will walk forward carrying a ball. The student will attempt to bounce and catch the ball in the four hoops that have been placed on alternate sides of the beam.

Ladder

1) Two students face each other on the side of the ladder and jump in and out of each space while holding hands.

2) Student puts bean bag between knees and jumps from space to space between rungs.

3) Two students stand face to face, each in a separate space between rungs of the ladder, holding hands. Both students jump between rungs. One student will be jumping forward and the other backward. Spotters necessary.

Grid Pattern

1) Student stands with one foot in each square. In a cross-over pattern the student will step through the squares crossing the left foot ahead to square in front of right. The right foot then crosses ahead to the square in front of the left foot. Repeat pattern.

2) Student will walk first on heels, then on toes

(alternately pointing outward and inward) through the squares.

3) Students throw bean bags into squares and jump to it with one jump. Pick bean bag up and throw again, then jump over and past bean bag. Throw with right hand then with left.

Visual Tracking

1) Student will lay on the mat while a helper swings a ball on a string in a vertical, horizontal and circular pattern above the student's eyes. Student must track the ball with their eyes only, keeping head very still.

Jumping Activity

1) Student will jump off bench and attempt a half turn landing.

2) Two students hold a rope six to twelve inches off the ground. A third student then hurdles over the rope.

Game

1) Students sit in a circle, each with two rhythm sticks. The teacher will play a record (Rhythm Sticks) that demonstrates different sound patterns. The students will be asked to listen and respond to the same pattern as heard on the record. If this record is not available, then the teacher may beat out several rhythm patterns.

EQUIPMENT NEEDED

1 balance beam (6 foot)

1 ladder (approximately 14 inches between rungs)

4 balls (6 - 8 inches in diameter)

3 tumbling mats

10 hoops

2 traffic cones

1 grid pattern (see diagram)

1 balance pole (broom stick)

1 yard stick

1 whiffle ball on a string (length of string - 3 foot)

5 bean bags

1 hopscotch pattern

5 bowling pins or indian clubs

10 frisbees

4 deck tennis rings

1 horizontal ladder

2 jump ropes

4 paper cups

1 bench

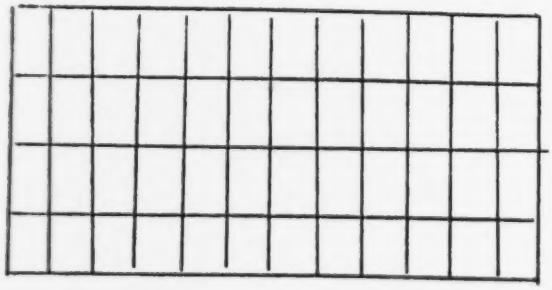
water to fill cups

1 record player

20 rhythm sticks

1 record (Rhythm Stick Activities available from Educational Activities, P.O. Box 392, Freeport, N.Y. 11520)

Grid Pattern is made up of four columns of 12 squares each. Each square is approximately 14 inches by 14 inches.



Balance Beam is two inches by four inches by six foot in length, approximately three foot off the ground.

APPENDIX F

Classroom Teacher's Evaluation

These are the four questions addressed:

1) Why was this child picked for this program?
2) Has the child's self-esteem improved from participation in this program?
3) Has the child become more settled and willing to listen since being involved in the developmental motor skills class?
4) Has there been any improvement in this child's academic ability as a result of being active in this special class?

The following are the teacher's responses to each of the 10 children picked for this practicum project:

Child A:

1) Difficulty in fine motor activities - handwriting. Poor self-concept.
2) Yes, this child bubbles over with excitement. He is excited to tell me what he's done in special class. He volunteers more readily in class. Interacts more with the other children. Very noticeable change in behavior and self-esteem.
3) No, he has always been settled.

4) This child's handwriting has improved! He is able to stay within the lines and form the letters more accurately. It does not take him as long to complete a handwriting assignment as it used to.

Child B:

1) Clumsiness, character and behavior problems, low academic performance - reading, math and handwriting, poor self-concept, inattention, carelessness, inability to retain and recall instructions, immaturity - inability to sit in seat and complete a task - short attention span.

2) No

3) No

4) No

Child C:

1) Low academic performance - reading, poor self-concept, inattention, carelessness, loss of place on page, inability to retain and recall instructions.

2) No

3) No

4) No

Child D:

1) Low academic performance - reading, poor self-concept.

2) Tremendous change in self-esteem. Before special class began, at P.E. time she often complained of stomach ache or headache. Since special class, she has been a different child. She comes in glowing. She's the first to recite or sing a song that has been learned in the special class. She is very proud of herself.

3) Always has been.

4) I have seen an improvement in reading. She seems to have learned reading vocabulary more easily. She is also reading more fluently. She is volunteering more often.

Child E:

1) Clumsiness, loss of place on page, inability to retain and recall instructions, inattention.

2) No, he didn't really have a problem here.

3) No

4) No

Child F:

1) Low academic performance - reading especially retention of vocabulary, comprehension, inability to differentiate letters such as b,d and recognize sequence of letters in a word, difficulty in understanding the meaning of words under, over, around.

2) No, there was never a problem.

3) No, there was never a problem.

4) No, there was never a problem.

Child G:

1) Character and behavior problems, poor self-concept, carelessness, loss of place on page.

2) Yes, especially in the beginning and up until the last couple weeks. He was sitting in his seat, working hard and listening. (Change may be due to end of the year-ready for summer)

3) Yes, same as 2.

4) He seems to be following along better in reading and concentrating more in reading group. Whereas before he was easily distracted and never knew where we were.

Child H:

1) Low academic performance - reading and math, poor self-concept.

2) Yes, she is speaking up instead of using the whisper voice she started the year with. She is volunteering more and seems unafraid to give an answer even if it's wrong. She is proud of herself and her accomplishments in special class and in the classroom.

3) No problem here.

4) No

Child I:

1) Character and behavior problems, low academic performance - reading and math, inattention, carelessness, loss of place on page, inability to recognize sequence of letters in a word.

2) For a while her self-concept improved. However, because of problems at home and emotional problems within, this improvement did not last.

3) No problem here.

4) No

Child J:

1) Low academic performance - reading and math, inability to differentiate letters b,d and recognize sequence of letters in a word.

2) Yes, he is very proud of himself and his accomplishments in special class. He enjoys telling me what he does in class. This has also carried over to volunteering in class. He seems more at ease.

3) He always has been.

4) No

I have noticed the biggest changes in Children A,D, J, G and H. Children A and D's self-concept has greatly improved. In the beginning both were quiet and reluctant to participate in classroom activities. (academic as well as physical). The change has been wonderful! They are so proud of their accomplishments! This attitude is carrying over to their schoolwork. Students J,G and H have also improved their self-concept and attitude toward school. However, not to the extreme of pupils A and D.

This program has been extremely successful considering the short time allowed for implementation. You have done a wonderful job. The kids have loved it and they love you!